

**HANSCOMB**  
**Faithful & Gould**

**Schematic Design Cost Estimate**

**WALLACE BUILDING EVALUATION**  
**Short Term Repairs and Modifications**  
**Des Moines, Iowa**

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December 15, 2004

**WALLACE BUILDING EVALUATION**  
**Short Term Repairs and Modifications**  
**Des Moines, Iowa****Schematic Design Cost Estimate****INTRODUCTION**

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**Project Description**

In brief, the project comprises short term repairs and modifications to the Wallace Building, Des Moines, Iowa. These repairs and modifications are understood to be the minimum work necessary.

This document is based on the measurement and pricing of quantities wherever information is provided and/or reasonable assumptions for other works not covered in the drawings and programs as stated in this document. The unit rates reflected herein have been obtained from historical records and discussion with subcontractors and suppliers. All unit rates relevant to subcontractor works include the subcontractors' overheads and profit.

**Documentation**

Hanscomb Faithful & Gould received the following documents from the Architect/Engineer for the preparation

Copies of original Construction drawings

State of Iowa Wallace Building Evaluation: Section 01011 Summary of Work

**Items excluded from the Cost Estimate**

Legal and accounting fees

Fire and all risk insurance

Construction contingency

Owner's contingency

Loose furniture, fittings and equipment (FF&E)

Moving costs

Window Treatments

Commissioning

**WALLACE BUILDING EVALUATION**  
**Short Term Repairs and Modifications**  
**EXECUTIVE SUMMARY**

<b>SITE</b>				<b>168,900</b>
<b>BUILDING ENVELOPE</b>				<b>14,500</b>
<b>BUILDING INTERIOR</b>				<b>74,655</b>
<b>BUILDING MECHANICAL</b>				<b>148,500</b>
<b>BUILDING ELECTRICAL</b>				<b>39,350</b>
<b>SUBTOTAL</b>				<b>445,905</b>
<b>MARK-UP</b>				
General Conditions/insurance/bond/permits	9.00%	of	445,905	40,131
CM/GC Fee	4.00%	of	486,036	19,441
Architect/Engineer Design Fee	12.00%	of	505,478	60,657
<b>SUBTOTAL</b>				<b>566,135</b>
<b>CONTINGENCIES/ESCALATION</b>				
Design Contingency	10.00%	of	566,135	56,614
Escalation (Excluded)				
Construction Contingency (Excluded)				
Owner's Contingency (Excluded)				
<b>CONSTRUCTION TOTAL</b>				<b>622,749</b>

**WALLACE BUILDING EVALUATION**  
**Short Term Repairs and Modifications****ESTIMATE SUMMARY**

		Total excl. markup	Total incl markup	% of Total
<b>SITE</b>				
Grounds and Landscaping		-		
Parking Ramp (Short Term)		2,150	3,003	
Sidewalks and Parking		-	0	
Utilities		166,750	232,882	
		<b>168,900</b>	<b>235,885</b>	<b>37.9%</b>
<b>BUILDING ENVELOPE</b>				
Roof		12,000	16,759	
Walls		-	0	
Glass		-	0	
Entrances		2,500	3,491	
		<b>14,500</b>	<b>20,251</b>	<b>3.3%</b>
<b>BUILDING INTERIOR</b>				
Space Design		64,655	90,297	
Walls		-	0	
Ceilings		-	0	
Floors		-	0	
Structure		-	0	
DCI Firing Range		10,000	13,966	
		<b>74,655</b>	<b>104,263</b>	<b>16.7%</b>
<b>BUILDING MECHANICAL</b>				
Utilities		6,000	8,380	
Water		-	0	
Sanitary Sewer		-	0	
Storm Water		-	0	
Chilled Water		-	0	
Steam and Condensate		-	0	
Natural Gas		-	0	
HVAC		142,500	199,015	
		<b>148,500</b>	<b>207,394</b>	<b>33.3%</b>
<b>BUILDING ELECTRICAL</b>				
Main		-	0	
Distribution		39,350	54,956	
Lighting		-	0	
Phone		-	0	
P/A		-	0	
Low Voltage Systems		-	0	
		<b>39,350</b>	<b>54,956</b>	<b>8.8%</b>
<b>SUB-TOTAL</b>		<b>445,905</b>	<b>622,749</b>	<b>100%</b>
<b>MARK-UP</b>				
General Conditions/insurance/bond/permits	9.00%	40,131		
CM/GC Fee	4.00%	19,441		
Architect/Engineer Design Fee	12.00%	60,657		
<b>SUBTOTAL</b>		<b>566,135</b>		
<b>CONTINGENCIES/ESCALATION</b>				
Design Contingency	10.00%	56,614		
Escalation	0.00%	0		
<b>CONSTRUCTION TOTAL</b>		<b>622,749</b>		

WALLACE BUILDING EVALUATION  
Short Term Repairs and Modifications  
Des Moines, Iowa

	Item / Description	Quantity	Unit	Rate \$	SubTotal \$	Total \$
<b>2.1</b>	<b><u>SITE</u></b>					
2.1.A	<u>Grounds and Landscaping</u>					
2.1.A.1	Civil/Structural/Architectural - N/A				-	
2.1.A.2	Mechanical - N/A				-	
2.1.A.3	Electrical -N/A				-	
2.1.A.4	Low Voltage Systems - N/A				-	
	Subtotal Grounds and Landscaping					-
2.1.B	<u>Parking Ramp (Short Term)</u>					
2.1.B.1	Civil/Structural/Architectural					
2.1.B.1.a.1	Beams - Shore two cracked beams at 10ft elevation	2	ea	450.00	900	
2.1.B.1.a.2	Beams - Maintain monitoring to verify condition of Upper Deck (by Owner)				-	
2.1.B.1.c.1	Upper Deck - Permanently block off upper deck from traffic	1	ea	1,250.00	1,250	
2.1.B.2	Mechanical - N/A				-	
2.1.B.3	Electrical				-	
	No work				-	
2.1.B.4	Low Voltage Systems - N/A				-	
	Subtotal Parking Ramp (Short Term)					2,150
2.1.C	<u>Sidewalks and Parking</u>					
2.1.C.1	Civil/Structural/Architectural				-	
2.1.C.1.a	No work				-	
2.1.C.2	Mechanical - N/A				-	
2.1.C.3	Electrical -N/A				-	
2.1.C.4	Low Voltage Systems - N/A				-	
	Subtotal Sidewalks and Parking					-
2.1.D	<u>Infrastructure</u>					
2.1.D.1	Civil/Structural/Architectural - N/A				-	
2.1.D.2	Mechanical - N/A				-	
2.1.D.3	Electrical -N/A				-	
2.1.D.4	Low Voltage Systems - N/A				-	
	Subtotal Infrastructure					-
2.1.E	<u>Utilities</u>					
2.1.E.1	Civil/Structural/Architectural				-	
2.1.E.1.a	Install four 8' by 8' transformer pads, including dikes for oil containment	4	ea	6,300.00	25,200	
2.1.E.2	Mechanical - N/A				-	
2.1.E.3	Electrical -N/A				-	
2.1.E.3.a	P&I two new 2000kVA oil-filled transformers	2	ea	35,000.00	70,000	
2.1.E.3.b	P&I #1 copper AWG 15kV cables in 4" conduit	150	lf	100.00	15,000	
2.1.E.3.c	P&I two (2) new 1200 amp 15KV bus fused disconnects	2	ea	16,000.00	32,000	
2.1.E.3d	P&I seven (7) 4" conduits each containing four (4) 500kcmil 600 volt copper cables	350	lf	33.00	11,550	
2.1.E.3.e	P&I two (2) 5" conduits with 500kcmil copper 15KV cable 100 feet from new fused 15KV disconnects to existing switchgear	200	lf	65.00	13,000	
2.1.E.4	Low Voltage Systems - N/A				-	
	Subtotal Utilities					166,750
	<b>SUBTOTAL SITE</b>					<b>168,900</b>
<b>2.2</b>	<b><u>BUILDING ENVELOPE</u></b>					
2.2.A	<u>Roof</u>					
2.2.A.1	Civil/Structural/Architectural				-	
2.2.A.1.a	Repair 2nd level membrane roof, maintenance allowance	1	ls	10,000.00	10,000	
2.2.A.1.b	Replace southwest skylight double dome, 4' diameter	1	ea	2,000.00	2,000	
2.2.A.2	Mechanical				-	
2.2.A.2.a	No work				-	
2.2.A.3	Electrical				-	
2.2.A.3.a	No work				-	
2.2.A.4	Low Voltage Systems - N/A				-	
	Subtotal Roof					12,000
2.2.B	<u>Walls</u>					

**WALLACE BUILDING EVALUATION**  
**Short Term Repairs and Modifications**  
**Des Moines, Iowa**

	Item / Description	Quantity	Unit	Rate \$	SubTotal \$	Total \$
2.2.B.1	Civil/Structural/Architectural (see Add Alternate #1)				-	
2.2.B.2	Mechanical - N/A				-	
2.2.B.3	Electrical -N/A				-	
2.2.B.4	Low Voltage Systems - N/A				-	
	<b>Subtotal Walls</b>					-
2.2.C	<a href="#">Glass</a>					
2.2.C.1	Civil/Structural/Architectural (see Add Alternate #2)				-	
2.2.C.2	Mechanical - N/A				-	
2.2.C.3	Electrical -N/A				-	
2.2.C.4	Low Voltage Systems - N/A				-	
	<b>Subtotal Glass</b>					-
2.2.D	<a href="#">Entrances</a>					
2.2.D.1	Civil/Structural/Architectural				-	
2.2.D.1.a	Install egress door in East wall of Mechanical Transformer Room	1	ea	2,500.00	2,500	
2.2.D.2	Mechanical - N/A				-	
2.2.D.3	Electrical -N/A				-	
2.2.D.4	Low Voltage Systems - N/A				-	
	<b>Subtotal Entrances</b>					2,500
	<b>SUBTOTAL BUILDING ENVELOPE</b>					<b>14,500</b>
2.3	<b><u>BUILDING INTERIOR</u></b>					
2.3.A	<a href="#">Space Design</a>					
2.3.A.1	Civil/Structural/Architectural				-	
2.3.A.1.a.1	Mech Room 174, 175, 176: Replace doors and frames with fire rated	3	ea	1,250.00	3,750	
2.3.A.1.a.2	Mech Room 174, 175, 176: Upgrade walls with metal studs and two layers 5/8" sheetrock	990	sf	5.50	5,445	
2.3.A.1.a.3	Mech Room 174, 175, 176: Apply fire proof sealants at all pipe and duct openings	1	ls	3,000.00	3,000	
2.3.A.1.a.4	Mech Room 174, 175, 176: Fir out ceiling with metal studs and two layers sheetrock	910	sf	6.00	5,460	
2.3.A.1.b.1	Atrium Floor edges: (see Add Alternate #3)				-	
2.3.A.1.c.1	No work				-	
2.3.A.2	Mechanical				-	
2.3.A.2.a	Install four (4) two-hour smoke/fire dampers at duct openings through Boiler Mechanical Room	4	ea	1,000.00	4,000	
2.3.A.2.b	Install two-hour smoke/fire dampers at duct openings through Boiler Mechanical Room	1	ls	10,000.00	10,000	
2.3.A.2.c	Reroute and insulate existing copper lines so they do not pass over electrical gear	1	ls	4,000.00	4,000	
2.3.A.2.d	No work				-	
2.3.A.2.e	Install additional ventilation in the electrical transformer room	1	ls	25,000.00	25,000	
2.3.A.2.f	Install drip pans under water lines above primary switchgear	1	ls	3,000.00	3,000	
2.3.A.3	Electrical				-	
2.3.A.3.a	Remove all chemicals form Chemical Storage area. Reclassify area	1	ls	1,000.00	1,000	
2.3.A.4	Low Voltage Systems - N/A				-	
	<b>Subtotal Space Design</b>					64,655
2.3.B	<a href="#">Walls</a>					
2.3.B.1	Civil/Structural/Architectural - N/A				-	
2.3.B.2	Mechanical - N/A				-	
2.3.B.3	Electrical -N/A				-	
2.3.B.4	Low Voltage Systems - N/A				-	
	<b>Subtotal Walls</b>					-
2.3.C	<a href="#">Ceilings</a>					
2.3.C.1	Civil/Structural/Architectural - N/A				-	
2.3.C.2	Mechanical - N/A				-	
2.3.C.3	Electrical -N/A				-	
2.3.C.4	Low Voltage Systems - N/A				-	
	<b>Subtotal Ceilings</b>					-
2.3.D	<a href="#">Floors</a>					

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**Des Moines, Iowa**

	Item / Description	Quantity	Unit	Rate \$	SubTotal \$	Total \$
2.3.D.1	Civil/Structural/Architectural - N/A				-	
2.3.D.2	Mechanical - N/A				-	
2.3.D.3	Electrical -N/A				-	
2.3.D.4	Low Voltage Systems - N/A				-	
	<b>Subtotal Floors</b>					-
2.3.E	<a href="#">Structure</a>					
2.3.E.1	Civil/Structural/Architectural - N/A				-	
2.3.E.2	Mechanical - N/A				-	
2.3.E.3	Electrical -N/A				-	
2.3.E.4	Low Voltage Systems - N/A				-	
	<b>Subtotal Structure</b>					-
2.3.F	<a href="#">DCI Firing Range</a>					
2.3.F.1	Civil/Structural/Architectural				-	
2.3.F.1.a	Lead Abatement	1	ls	10,000.00	10,000	
2.3.F.2	Mechanical - N/A				-	
2.3.F.3	Electrical -N/A				-	
2.3.F.4	Low Voltage Systems - N/A				-	
	<b>Subtotal DCI Firing Range</b>					10,000
	<b>SUBTOTAL BUILDING INTERIOR</b>					<b>74,655</b>
2.4	<b><u>BUILDING MECHANICAL</u></b>					
2.4.A	<a href="#">Utilities</a>					
2.4.A.1	Civil/Structural/Architectural - N/A				-	
2.4.A.2	Mechanical				-	
2.4.A.2.a	Utilize existing water, sanitary sewer, storm sewer, natural gas, central plant steam and central plant chilled water				-	
2.4.A.3	Electrical				-	
2.4.A.3.a	Upgrade to three lockable disconnects to exterior HVAC equipment and add ground fault circuit breakers	1	ls	6,000.00	6,000	
2.4.A.4	Low Voltage Systems - N/A				-	
	<b>Subtotal Utilities</b>					6,000
2.4.B	<a href="#">Water</a>					
2.4.B.1	Civil/Structural/Architectural - N/A				-	
2.4.B.2	Mechanical - N/A				-	
2.4.B.3	Electrical -N/A				-	
2.4.B.4	Low Voltage Systems - N/A				-	
	<b>Subtotal Water</b>					-
2.4.C	<a href="#">Sanitary Sewer</a>					
2.4.C.1	Civil/Structural/Architectural - N/A				-	
2.4.C.2	Mechanical - N/A				-	
2.4.C.3	Electrical -N/A				-	
2.4.C.4	Low Voltage Systems - N/A				-	
	<b>Subtotal Sanitary Sewer</b>					-
2.4.D	<a href="#">Storm Water</a>					
2.4.D.1	Civil/Structural/Architectural - N/A				-	
2.4.D.2	Mechanical - N/A				-	
2.4.D.3	Electrical -N/A				-	
2.4.D.4	Low Voltage Systems - N/A				-	
	<b>Subtotal Storm Water</b>					-
2.4.E	<a href="#">Chilled Water</a>					
2.4.E.1	Civil/Structural/Architectural - N/A				-	
2.4.E.2	Mechanical - N/A				-	
2.4.E.3	Electrical -N/A				-	
2.4.E.4	Low Voltage Systems - N/A				-	
	<b>Subtotal Chilled Water</b>					-
2.4.F	<a href="#">Steam and Condensate</a>					
2.4.F.1	Civil/Structural/Architectural - N/A				-	
2.4.F.2	Mechanical - N/A				-	

WALLACE BUILDING EVALUATION  
Short Term Repairs and Modifications  
Des Moines, Iowa

	Item / Description	Quantity	Unit	Rate \$	SubTotal \$	Total \$
2.4.F.3	Electrical -N/A				-	
2.4.F.4	Low Voltage Systems - N/A				-	
	Subtotal Steam and Condensate					-
2.4.G	Natural Gas					
2.4.G.1	Civil/Structural/Architectural - N/A				-	
2.4.G.2	Mechanical - N/A				-	
2.4.G.3	Electrical -N/A				-	
2.4.G.4	Low Voltage Systems - N/A				-	
	Subtotal Natural Gas					-
2.4.H	HVAC					
2.4.H.1	Civil/Structural/Architectural - N/A				-	
	Replace ceiling for access to hot water heating systems	5	ea	1,500.00	7,500	
2.4.H.2	Mechanical - (see Add Alternate #3)				-	
2.4.H.2.a	Revise supply air diffusers and return grille components	100	ea	200.00	20,000	
2.4.H.2.b	Replace control valves, pumps and flow measuring devices to the five hot water heating systems	5	ea	10,000.00	50,000	
2.4.H.2.c	Leave in place existing air distribution system					
2.4.H.2.d	Testing, adjusting and balancing of all existing AHU's, pumps, VAV boxes, heating coils and all other terminal units	1	ls	50,000.00	50,000	
2.4.H.2.e	Provide "Operations and Maintenance Training/Workshop	1	ls	5,000.00	5,000	
2.4.H.3	Electrical				-	
2.4.H.3.a	Modify wiring for relocation of ten pumps	1	ls	10,000.00	10,000	
2.4.H.4	Low Voltage Systems - N/A				-	
	Subtotal HVAC					142,500
	<b>SUBTOTAL BUILDING MECHANICAL</b>					<b>148,500</b>
2.5	<b><u>BUILDING ELECTRICAL</u></b>					
2.5.A	Main					
2.5.A.1	Civil/Structural/Architectural - N/A				-	
2.5.A.2	Mechanical - N/A				-	
2.5.A.3	Electrical -N/A				-	
2.5.A.4	Low Voltage Systems - N/A				-	
	Subtotal Main					-
2.5.B	Distribution					
2.5.B.1	Civil/Structural/Architectural - N/A				-	
2.5.B.2	Mechanical - N/A				-	
2.5.B.3	Electrical -N/A				-	
2.5.B.3.a	Modify electrical switchgear in electrical room to permit removal of existing dry transformers	1	ls	5,000.00	5,000	
2.5.B.3.b	Remove old dry transformers	1	ls	5,000.00	5,000	
2.5.B.3.c	Install two additional 200A circuit breakers in Electrical Room	2	ea	2,500.00	5,000	
2.5.B.3.d	Restrict access to the Electrical Room to Qualified personnel	1	ls	350.00	350	
2.5.B.3.e	Test main circuit breakers and replace with larger panels	1	ls	16,000.00	16,000	
2.5.B.3.f	Identify and mark circuit breakers in HVAC Room	1	ls	1,000.00	1,000	
2.5.B.3.g	Identify and mark circuit breakers in Panel PP3	1	ls	1,000.00	1,000	
2.5.B.3.h	Identify and mark circuit breakers in Panel P3C	1	ls	1,000.00	1,000	
2.5.B.3.i	Identify and mark circuit breakers in Panel C3A	1	ls	1,000.00	1,000	
2.5.B.3.j	Identify and mark circuit breakers in Panel L4A	1	ls	1,000.00	1,000	
2.5.B.3.k	Identify and mark circuit breakers in 5th floor Panel	1	ls	1,000.00	1,000	
2.5.B.3.l	No work				-	
2.5.B.3.m	Remove and install panel 5-PB-1	1	ls	2,000.00	2,000	
2.5.B.3.n	No work				-	
2.5.B.4	Low Voltage Systems - N/A				-	
	Subtotal Distribution					39,350
2.5.C	Lighting					
2.5.C.1	Civil/Structural/Architectural - N/A				-	
2.5.C.2	Mechanical - N/A				-	
2.5.C.3	Electrical -N/A				-	
2.5.C.4	Low Voltage Systems - N/A				-	
	Subtotal Lighting					-



**WALLACE BUILDING EVALUATION**  
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**Des Moines, Iowa**

	Item / Description	Quantity	Unit	Rate \$	SubTotal \$	Total \$
2.5.D	<a href="#">Phone</a>					
2.5.D.1	Civil/Structural/Architectural - N/A				-	
2.5.D.2	Mechanical - N/A				-	
2.5.D.3	Electrical -N/A				-	
2.5.D.4	Low Voltage Systems - N/A				-	
	<a href="#">Subtotal Phone</a>					-
2.5.E	<a href="#">P/A</a>					
2.5.E.1	Civil/Structural/Architectural - N/A				-	
2.5.E.2	Mechanical - N/A				-	
2.5.E.3	Electrical -N/A				-	
2.5.E.4	Low Voltage Systems - N/A				-	
	<a href="#">Subtotal P/A</a>					-
2.5.F	<a href="#">Low Voltage Systems</a>					
2.5.F.1	Civil/Structural/Architectural - N/A				-	
2.5.F.2	Mechanical - N/A				-	
2.5.F.3	Electrical -N/A				-	
2.5.F.4	Low Voltage Systems - N/A				-	
	<a href="#">Subtotal Low Voltage Systems</a>					-
	<b>SUBTOTAL BUILDING ELECTRICAL</b>					<b>39,350</b>

**WALLACE BUILDING EVALUATION**  
**Short Term Repairs and Modifications**  
**Des Moines, Iowa****Schematic Design Cost Estimate****QUALIFICATIONS AND PRICING NOTES**

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**Basis of Pricing**

Pricing shown reflects probable construction costs obtainable in the Des Moines, Iowa area on the date of this statement of probable costs. This estimate is a determination of fair market value for the construction of this project. Pricing assumes competitive bidding for every portion of the construction work for all subcontractors, that is to mean 4 to 5 bids. If fewer bids are received, bid results can be expected to be higher.

Subcontractor's markups have been included in each line item unit price. These markups cover the cost of field overhead, home office overhead, and profit. These markups can range from 5% to 15% of the cost for that particular item of work. The rates that have been established are for budgetary purposes only and are not to be used to establish the cost of additions or deletions to the scope of work that may arise during the actual construction process.

General Contractors General Conditions, overhead and profit are calculated at 13%.

**Design Contingency**

A 10% design/estimating contingency has been included in the estimate, the proposed revisions are considered to be conceptual/schematic in nature. This contingency should be reduced to zero at bid stage, but the monies identified are likely to be absorbed in the detail "above-the-line".

**Escalation**

Allowances included within this estimate are of a budgetary nature, for this reason we have not applied an escalation factor to reflect out-turn cost.

**Items that may affect the cost estimate**

Modifications to the scope of work included in this estimate.  
Special phasing requirements.  
Restrictive technical specifications or excessive contract conditions.  
Any other non-competitive bid situations.  
Bids delayed beyond the projected schedule.

**Statements of Probable Cost**

Hanscomb Faithful & Gould has no control over the cost of labor and materials, general contractor's or any subcontractor's method of determining prices, or competitive bidding and market conditions. This opinion of probable cost of construction is made on the basis of the experience, qualifications, and best judgment of the professional consultant familiar with the construction industry. HF&G cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from this or subsequent cost estimates.

HF&G's staff of professional cost consultants has prepared this estimate in accordance with generally accepted principles and practices. This staff is available to discuss its contents with interested personnel. Due to the nature of the works, and the extensive amount of hazardous materials to be removed, we would anticipate that this estimate be accurate to +15%/-25%.

### **Recommendation for Cost Control**

Hanscomb Faithful & Gould recommends that the Owner carefully review this document, including line item descriptions, unit prices, clarifications, exclusions, inclusions and assumptions, contingencies, escalation and markups. If the project is over budget, or if there are unresolved budgeting issues, alternate schemes should be evaluated before proceeding into the design phase.